

REVIEW: PARTNER SUPPORT AND PHYSICAL ACTIVITY AMONG MEXICAN AMERICAN WOMEN

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Objective: Global recommendations on physical activity for noncommunicable disease prevention can be promoted using partner support strategies among women of Mexican descent and other ethnicities.

Design/Methods: This systematic review utilized a multifaceted ecological approach by focusing comprehensively on community, individual, and social factors influencing physical activity. PubMed, SAGE Publications, EBSCO, ResearchGate, the Cochrane Library and Google Scholar search engines were used to find research on physical activity, with inclusion criteria of Mexican American women, aged ≥ 18 years, comprising at least 50% of study population sizes.

Main Outcome Measures: An initial search of 232 articles with subsequent searches from reference lists led to selection of a mixture of qualitative (3), mixed methods (3), and intervention (1) studies reporting partner support for physical activity as perceived by women.

Results: Primarily, studies have conceptualized physical activity as leisure time activities. Few studies have considered multiple ecological factors in examining influences of physical activity among women. Importantly, how women perceive support for physical activity received from partners has been shown to influence their levels of activity.

Conclusions: Conceptualization of physical activity restricted only to leisure time eliminates other domains that a broader definition of the term encompasses. Future studies are needed to investigate partner support influences on the overall physical activity of Mexican American women within a larger ecological context. Careful attention to partner support for physical activity en-

INTRODUCTION

Across the world, women reportedly engage in less physical activity (PA) than men.¹ This gender disparity is particularly important since PA is a core health indicator recommended for noncommunicable disease prevention.² High prevalence rates of physical inactivity exists among women (almost 50%) and men (40%) in countries of the Americas (eg, Columbia, Dominican Republic, Puerto Rico, the United States [US], and Mexico).³ A growing body of evidence suggests that Mexican American women (MAW) do not meet the current physical activity (PA) recommendations of 150 minutes of moderate activity or 75 minutes of vigorous activity per week.^{4,5} MAW are considered a subset of the larger Hispanic/Latino population,⁶ which is projected to increase to 128.8 million by the year 2060.⁷ A reason for concern is decreased PA level com-

pounded by high prevalence rates of obesity among MAW increases their risk for cardiovascular disease, diabetes and other conditions.⁸ Reports from the 1999-2006 National Health and Nutrition Examination Survey revealed notably lower leisure time physical activity (LTPA) among Mexican American and non-Hispanic Black adults when compared with their non-Hispanic White counterparts.⁹ The global definition for LTPA refers to PA done during leisure time (eg, walking, swimming, dancing); whereas, overall PA includes all types of activities performed for occupation, transportation, household duties, sports, play, games, and planned exercise.¹⁰ In particular, engagement in LTPA has been challenging for Latino/Hispanic women,^{11,12} with a great majority of MAW (74%) lacking participation.⁸

Global recommendations for both leisure and non-leisure activities are promoted within the context of the

agement can help ameliorate and prevent chronic diseases both nationally and around the world. *Ethn Dis*. 2018;28(4):555-560; doi:10.18865/ed.28.4.555.

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community, individual and family.¹⁰ Current evidence has identified use of a comprehensive ecological framework focusing on environmental, individual and social factors as appropriate in examining influences of family support in PA studies involving overweight/obese Hispanic and African American women.¹³ Similarly, a broad social contextual framework that includes physical environment and social support factors has been shown to be useful in targeting complex PA and diet-related health behaviors in older Mexican adults.¹⁴ In a systematic review involving mixed ethnicities including African American and Hispanic/Latino adults, studies that used social support as an interventional strategy have reported increased PA compared with those who did not.¹⁵ Importantly, among recommended strategies for increasing PA levels, having an accountability partner (eg, spouse) has been distinctly emphasized.¹⁶ The purpose of this review is to explore influences of perceived partner support on PA among MAW.

METHODS

A multifaceted ecological framework was used to examine studies at the individual, social and community levels. Peer reviewed articles were retrieved from different research databases and analyzed, resulting in selection of a range of qualitative, intervention and mixed methods studies that met our search criteria.

Literature Search

For this systematic review, PubMed, SAGE Publications, EBSCO, ReseachGate, the Cochrane

Library, and Google Scholar search engines were used to access peer-reviewed articles published in English from 1992 to 2018. An initial search was performed using the keywords: partner, spouse, husband, social support, physical activity, exercise, Mexican American women, Mexico, Latino, Latina, and Hispanic; this search yielded 232 articles. Next, a reference librarian was consulted to

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run a search of the same keywords using truncation to capture different forms of the terms. After several attempts, the search led to seven articles.

Selection of Retrieved Articles

Peer-reviewed research studies and systematic reviews on physical activity were selected based on inclusion criteria: 1) at least 50% of the study population comprised women identified as Mexican descent; 2) aged ≥ 18 years; and 3) without any reported chronic illnesses. Articles including the terms, partner, husband, spouse, or identified as living together were chosen for the review while all non-English studies, conference proceedings, and dissertations were excluded. Initially, only five articles were found. Refer-

ence lists of the primary authors were examined leading to two additional articles that met inclusion criteria.

Study Quality and Data Extraction

Both authors of this review determined study quality based on eligibility criteria. Two key elements of study quality were that the research included demographic data on ethnic background of participants and examined partner support for PA as perceived by women. The first author performed data extraction, followed by review and verification by the second author. Data extracted included first author, purpose, characteristics, study design, and key findings of studies. Information was logged into the tables after discrepancies in the studies were checked, clarified, and discussed.

RESULTS

For this review, we identified 3 qualitative, 1 intervention, and 3 mixed methods studies. Collectively, these studies have provided specific and meaningful insights on the influences of perceived partner support on PA levels among Hispanic, Latino and MAW. Quantitative studies involving MAW have used a complex ecological approach to investigate cultural, social, economic and environmental influences on PA.¹⁷ However, few qualitative studies have used this approach encompassing community, social support, and individual factors to better understand how women perceive support received from their partners particularly for LTPA.^{18,19} As a typical example, women mentioned that not

being able to drive to exercise facilities (community factor) and depending on their husbands to drive them (instrumental support) have deterred them from being physically active.¹⁸

Study Populations

For this systematic review, studies that were included had study population sizes ranging from 7 to 269 women (Table 1). Although the term Latina was used to broadly categorize the cultural backgrounds of women in most studies,¹⁸⁻²² the majority of women (83%) in each study were either born in Mexico or self-identified as Mexican American. Other specified countries of origin included Columbia, Dominican Republic,¹⁸ Puerto Rico, Cuba,²⁰ El Salvador, Honduras,^{18,22} and Costa Rica.²² Only one study comprised a homogenous group of MAW.²³ Two studies consisted primarily of MAW (95% and 96%, respectively),^{19,21}

but did not report other countries of origin. Across studies, the majority of women spoke Spanish.¹⁹⁻²³ Women ranged widely in age from aged ≤ 40 years²³ to aged ≤ 66 years.²¹ Additionally, one qualitative study reported age range of 40 to 79 years²⁰ and one qualitative study reported age range of 40 to 80 years,²² although the mean and median age for women in both studies was aged 55-56 years, respectively.

The majority of studies directed attention to PA performed in gyms or exercise facilities and walking.^{18-20,22,23} Although some studies focused on different aspects of PA referred to as PA domains, few individual studies^{21,24} and systematic reviews²⁵ concentrated on overall PA. Current knowledge promotes walking, climbing stairs, and playing sports as ways to incorporate exercise into daily lives,⁴ expanding on an earlier definition of “planned,” “structured,” and

“purposeful” bodily movements in a single domain. Recommendations for increased PA in a variety of domains (ie, home, work, leisure time, and transportation) suggest inclusion to attain overall PA.²⁶ Recently, emphasis has been placed on transportation as an important, though often omitted, component in PA research.²⁷ Yet, no quantitative study was found to include partner support within the context of an ecological approach to simultaneously examine multiple factors (ie, individual/cultural, social, and community/environmental levels) that influence engagement in LTPA.

Partner Support

Across studies, data pertaining to partner support for PA were obtained using a variety of measures in research employing qualitative, quantitative, and mixed-methods designs. The measures used in one community-based

Table 1. Perceived partner support reported in selected studies, 1992-2018

Study	Purpose	Characteristics	Study design	Key findings
Parra-Medina & Hilfinger Messias ¹⁷	Determine willingness, readiness/ability to regularly participate in LTPA	Texas; 69 women; mean age = 44.3	Intervention study; Formative assessments using focus groups	Husband's jealousy; wives restricted from leaving home, lack of time; occupation and household duties
Evenson et al ¹⁸	Understanding social, cultural, environmental and policy factors associated with PA	North Carolina; 49 participants; mean age = 32	Qualitative; focus groups	Exercise/sports are for men; time/energy constraints from household, childcare and occupation; depend on husbands for transportation
Martinez et al ¹⁹	Examine facilitators of an barriers to PA	San Diego, California; 25participants	Qualitative study	Husbands disapprove of exercise outfits; men play sports; time constraints
Juarbe et al ²⁰	Describe barriers and benefits to PA engagement	143 participants; age 40-79	Mixed methods; semistructured interview	Unable to drive to exercise facilities; time/role constraints; lack of spousal support
Skowron et al ²¹	Identify factors influencing LTPA	Illinois; 269 participants, age 18-66	Mixed-methods study	Women should stay at home; motivated by exercising with husband
Ramirez et al ²²	Examine attitudes, knowledge and behaviors on exercise/nutrition	Texas; 75 participants, age 40-80	Qualitative study	Wives discouraged from exercising; husband's jealousy; neighborhood safety
Juarbe et al ²³	Examine behaviors, attitudes, beliefs, PA and physical fitness	Northern California; 51 immigrants; age 21-40	Mixed-methods study	Discouraged from exercising; not supported by husbands and partners; seen as harmful to reproduction

PA, physical activity; LTPA, leisure time physical activity.

participatory research study included formative assessments, with semi-structured interviews conducted by community leaders, and focus group data collected prior to implementation of an LTPA intervention led by promotoras (ie, lay health educators).¹⁷

Individual-level

Women were interviewed individually in studies using open-ended questions to examine benefits and barriers to being physically active,²⁰ and to identify attitudes related to beliefs about health and exercise.²³ Women reported lack of time to engage in PA,^{18,20,22} and the traditional gender role of women staying at home and caring for the family as the most common barriers.^{18,20,22} The wide age range (18-80 years) of women represented identifies gender role as a cultural expectation that extends beyond the child-rearing years.

Social-level

Several studies had conducted focus groups to assess barriers to and facilitators of PA at the social level.^{18,19,22} Overall, current evidence reveals that lack of support for PA received from partners has strongly influenced PA engagement among MAW.¹⁷⁻²³ Specific emerging themes pertaining to partner support for PA are that exercise is not for women,^{18,22,23} disapproval of exercise outfit,¹⁹ and jealousy among men.^{17,22}

Community-level

Facilitators of and barriers to PA at the community level were examined through focus groups.^{18,19,22} Findings revealed that cultural influences are compounded by concerns about neighborhood safety,^{17,18} and lack of transportation.^{18,20} While some studies, involv-

ing primarily women born in Mexico (88%) found that concern about neighborhood safety was a community-level barrier¹⁸; other studies with larger samples of MAW (95%) did not report this finding.²¹ These inconsistencies in findings suggest that variations in MAW's perceptions of neighborhood characteristics may contribute to differences in PA reported across studies.

DISCUSSION

In exploring the influence of partner support of PA among MAW, most studies identified in this review employed qualitative and mixed methods designs, using focus groups and interviews as the main data collection strategy. Although conceptualization of PA varies across studies, most studies focused on exercise and excluded commonly engaged activities, such as housework, gardening, etc. Emphasis placed on exercise across studies makes it difficult to draw conclusions regarding partner support for overall PA that includes a broader range of activities among MAW. Nonetheless, studies examining exercise among MAW in this review provide insights on partner support that may be beneficial in understanding other kinds of physical activities. The American Heart Association recommendations of three bouts of daily PA involving any type of bodily movements lasting 10 to 15 minutes to burn calories²⁶ indicates acceptability of a variety of activities. Exclusion of any of the activity domains (eg, occupation and transportation) can lower the quantity of overall PA reported to a great degree,²⁵ consequently contributing to an inaccurate

assessment of activity levels for cardiovascular health benefits as inadequate.

Studies with samples of Hispanics/Latinos that reported no significant differences in PA between married and unmarried women²⁸ had participants who were largely from non-Mexican American origin (65% Dominican/Columbian). However, similar studies conducted primarily with MAW have shown high levels of PA among younger women,^{24,29} and married women.²⁹ More current evidence revealing Central American/Mexican American men and women as having the highest level of occupation-related PA when compared with those of other Hispanic/Latino backgrounds³⁰ indicates importance of including activities in this domain.

Findings generated primarily from studies involving focus groups showed that partner support is a key influence on PA among MAW. Similar results were also reported by women during one-on-one interviews.^{20,23} Comparatively, value placed on earlier studies targeting family vs individually focused diet and PA interventions for weight reduction³¹ still remains relevant decades later. Additionally, the effectiveness of partner support through action control using text messages as an effective strategy for increasing PA levels has recently been demonstrated in a randomized controlled trial conducted in Switzerland involving couples.³² It is then likely that partners of MAW may be more receptive toward a family-based vs an individual-based approach targeting lifestyle behavioral changes. Interestingly, performance of housework promoted as a way to foster higher PA, and walking advocated as easy, safe, convenient and cost-effective in meeting recommended PA levels³³ may

be more culturally acceptable to partners of MAW when presented within the context of gender role expectations. Engagement in PA when presented to women within the context of their caregiving role can create opportunities for the family to spend time together while they walk in protected areas (eg, park or mall). Importantly, PA involving the entire family may offer promise as a strategy because it encourages women to remain with their families, thereby decreasing potential risk for jealousy

of other types (ie, household, transportation, and occupation) indicating that further research is needed to examine overall PA of MAW. This is particularly important given that partner support may be higher in other PA domains (eg, household and occupation) than LTPA. Certainly, the relationship between partner support and PA can be better understood by utilizing a broader overall PA definition in future studies.

Quantitative studies including interview guides are needed to increase understanding of the influence of partner support on overall PA. Additionally, studies involving male partners can contribute greatly by gaining their perspectives on PA engagement of MAW leading to important and meaningful insights beneficial for future nursing intervention programs to enhance PA among MAW. Targeting social support factors previously established as important for maximizing success in PA programs^{34,35} can help partners feel more empowered to support PA among MAW. Finally, based on community insights describing the complexities of environmental, individual and social level influences on PA,¹³ strong emphasis should be placed on identifying partner support as a vital component of social support that can be further investigated.

CONCLUSIONS AND IMPLICATIONS

The well-documented link between reported low PA levels and concerns regarding cardiovascular and similar health conditions among MAW drive the need for improved social support strategies to counter-

act increased risk for cardiovascular disease. Despite limited quantitative research examining support for PA received from partners in relation to PA engagement, sufficient qualitative knowledge exists demonstrating relevance of this important relationship. However, variations in PA definitions and inconsistent conceptualization across studies when examining partner support create difficulties in drawing accurate conclusions. Consequently, future studies should clearly define and measure overall PA while investigating influences of partner support using comprehensive ecological measures.

CONFLICT OF INTEREST

No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Congello, Koniak-Griffin; Acquisition of data: Congello; Data analysis and interpretation: Congello, Koniak-Griffin; Manuscript draft: Congello, Koniak-Griffin; Statistical expertise: Congello; Administrative: Koniak-Griffin; Supervision: Koniak-Griffin

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Studies examining exercise among MAW in this review provide insights on partner support that may be beneficial in understanding other kinds of physical activities.

when women leave their homes. Further, cultural values of women caring for their children, family and partners are strengths and motivating factors for women to better care for themselves so that they can adequately care for others.

The extensive use of qualitative data in this review does not infer causation, and findings about partner support cannot be interpreted as a direct cause for low levels of PA among MAW, although the importance of multi-dimensional influences on PA are highlighted. The domain of PA focused exclusively on exercise in the studies reviewed, without investigation

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